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ABSTRACT

The Berlin Longitudinal Study of Early Adaptation to Novel Situations examined early day-care experiences and the security of infant-mother attachment. Thirty-four infants entering day care before their first birthday and 20 infants entering between 12 and 18 months were compared in their reactions to day care during the first 4 weeks of familiarization with the new setting. Results indicated that one-third of the infants reacted to the new experience with lowered mood and increased irritability, with the reaction more intense but less prolonged in older infants. At 12 months of age, there were no significant differences in quality of attachment between infants with and without day care experience. At 21 months of age, however, children who had entered day care at a later age were more likely to be insecurely attached when they had experienced an abrupt mode of familiarization, while children who had entered late and by a lenient mode of familiarization were more likely to be securely attached at the end of the second year. (MDM)

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Day-Care Experience And Infant-Mother Attachment

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University of Potsdam and Free University Berlin, Germany

Poster presented at the 16th Biennial Meetings of ISSBD, August 12-16, 1996, Quebec, Canada

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Abstract

Infants with early day-care experience have been considered to be at risk of developing an insecure attachment to their mothers. The empirical basis for this contention is, however, weak.

In the „Berlin Longitudinal Study of Early Adaptation to Novel Situations" (Rauh et al, 1996), 54 infants, 34 infants entering day care before their first birthday and 20 infants entering thereafter, were compared in their reactions to day care during the first four weeks of familiarization with the new setting.

About one third of the infants reacted to the new experience with lowered mood and increased irritability. This reaction was more intense but less prolonged in older infants. The infants seemed to react less negatively when introduced quite rapidly and abruptly to the new setting. This was particularly true for younger infants. Later quality of attachment differentiated the older infants' reaction to day care, albeit mainly at home: Infants introduced to institutional care in a lenient way were less irritable at home and in higher spirits than were (older) infants with abrupt introduction.
It appears, that these older infants are able to relate experiences from both settings, and only by so doing, their experiences with day care may affect the relationships to their mothers.

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Introduction

Infants with early day-care experience have been assumed to be at risk of developing an insecure attachment to their mothers (Belsky, 1988). While age at enrollment, duration of daily attendance, and quality of day-care provision have been examined as potentially critical variables, the infants' actual separation experience, i.e. the ***kind or mode of introduction into out-of-home care*** and ***the infant's emotional well-being during the accommodation phase***, have rarely be considered.

A previous analysis of the *Berlin Longitudinal Study on Adaptation to Novel Situations in the First Year of Life* (Rauh et al., 1996) has led to the following conclusions:

At 12 months of age there were ***no*** statistically relevant ***differences in quality of attachment*** (classification according to Main and Solomon, 1990) between infants with and without day-care experience. Nor did mode of familiarization with day care, characterized as lenient or abrupt, make any difference.

At 21 months of age, in contrast, ***children who had entered late into day care were more likely to be insecurely attached when they had experienced an abrupt mode of familiarization while children who had entered late and by a lenient mode of familiarization were more likely to be securely attached at the end of the second year.*** This relation was independent of maternal sensitivity prior to day-care experience.

Research Questions

If mode of familiarization affects infant-mother attachment only for infants enrolled into day care *after* 12 months of age:

- **How do infants react emotionally to day-care entry *during* the 4 weeks of accomodation ?**

⇒How do they react

in the day-care setting **and** ***at home*****?**

Are there similarities and differences?

⇒Are their reactions dependent upon pace of accomodation or *mode of familiarization*?

- **Are their reactions related to *later quality of attachment*?**

- **Does the infant's emotional behavior vary in accord with *age at day-care entry*?**

Sample and Variables

Sociodemographic Characteristics of the Total Sample and the Subsamples		Total Sample (n=54)	Day-Care Entry Early (n=34)	Day-Care Entry Late (n=20)
Sex	Girls	30	15	15
	Boys	24	19	5
Level of Maternal Education	Below 10th grade	10	9	1
	Qualified 10th grade	23	12	11
	University entrance level	21	13	8
Birth Order	First-born	28	16	12
	Later-born	26	18	8

Variables	Definitions
1 ***Age at day-care entry***	***Early:*** Before 12 months of age (n=34) ***Late:*** Between 12 and 18 months of age (n=20)
2 ***Mode of familiarization to day care***	***Lenient*** = child attends less than 4 hours during the first 2-4 weeks ***Abrupt*** = child attends at least 4 hours from the first days
3 Infant s emotional reactions to day care ***Negative Mood,*** ***Irritability***	a) Caregiver ratings in the ***daycare setting*** b) Maternal ratings in the ***home setting*** ***Negative Mood:*** dichotomized 5-point scale: *partly unhappy to very unhappy* vs. happy, balanced, content ***Irritability:*** dichotomized 5-point scale: *partly to very brittle and irritable* vs. stable and robust
4 ***Quality of attachment***	Ainsworth s Strange Situation at 21 months, Classification acc. to Main and Solomon (1990): ***secure*** vs. ***insecure***

Results (1)

⇒About ***one third of the infants*** reacted with ***increased irritability*** and ***negative mood*** to their day-care experience, with a peak in the 2nd week ***in the day-care setting***, and increased irritability in the 1st and the 4th week ***at home***.

⇒***Only in the 1st week*** the ratings in ***the two settings***, day care and home, ***correlated***. Irritation and low mood in the institution did not predict low emotions at home in the following weeks.

Correlations Between Settings

Week	Negative Mood	Irritability
1	.33*	.41**
2	07	04
3	- 08	16
4	17	12

⇒There was ***moderate individual stability*** between weeks in emotional reactions, but ***mainly in the day-care setting***.

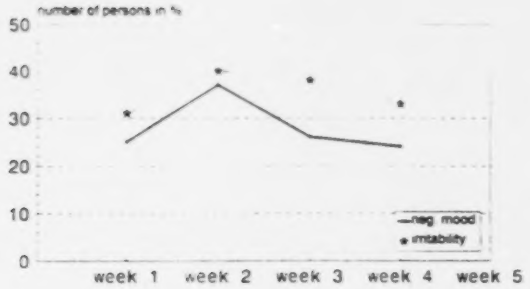
Stability between the weeks within the settings (Kendall's tau)

	Day Care		Home	
weeks	Negative Mood	Irritability	Negative Mood	Irritability
1-2	.33*	.37**	.51***	29
2-3	.50***	.54***	15	25
3-4	29	.47**	06	- 03

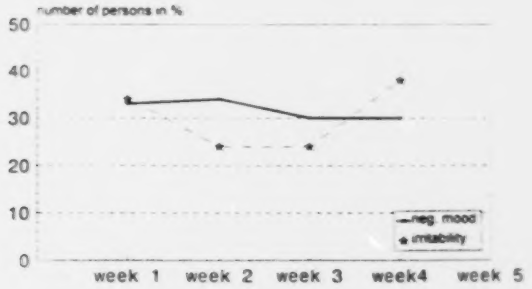
⇒**42% of the infants experienced an *abrupt mode of familiarization*** with day care. In the ***day-care setting*** they tended to react ***with less irritability*** and ***less negative mood*** (in 4th week sign.), ***at home*** they were ***less irritable*** only in the 2nd week.

The Emotional Reaction to Day-Care-Entry (Total Sample)

in the Day-Care Setting

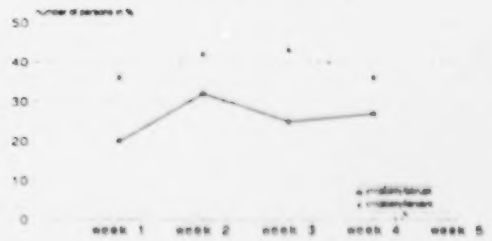


in the Home Setting

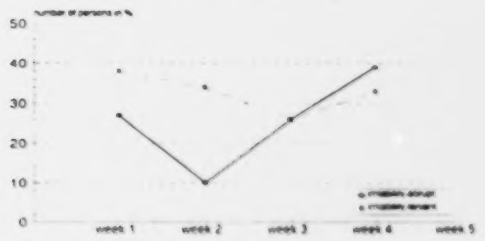


Mode of Familiarization abrupt vs. lenient

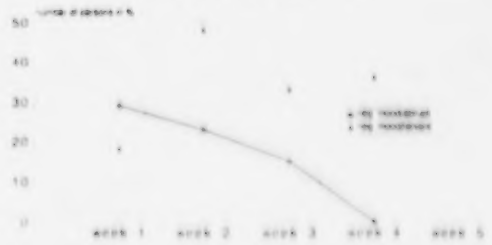
in the Day-Care Setting



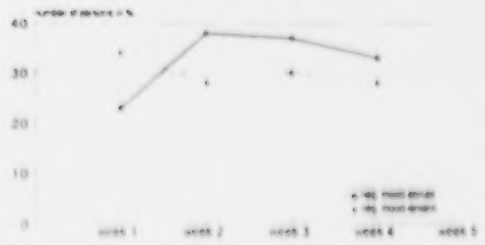
in the Home Setting



in the Day-Care Setting



in the Home Setting



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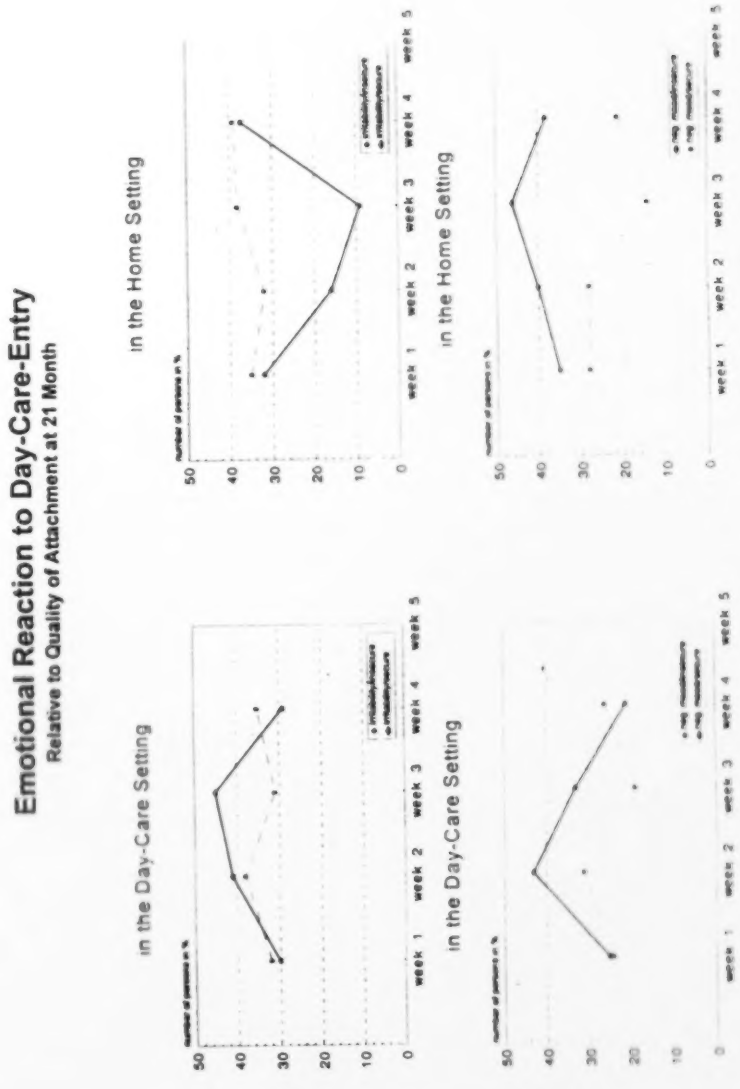
Results (2)

- **52% of the infants were rated insecurely attached at the age of 21 months** (classification according to Main and Solomon, mostly of the D category)

- ***In the day-care setting, infants rated as insecurely attached*** at 21 months of age tended to react with ***less irritability and less negative mood*** than did infants later rated securely attached.

- There was little change over time in the group of insecurely attached infants. ***Securely attached infants*** showed an ***increase*** in irritability to the 3rd week (significant group difference) and a ***decrease*** thereafter.

- ***At home***, in contrast, ***securely attached infants*** were ***markedly less irritable***, notably in the 2nd and 3rd week (sign. group difference)


Emotional Reaction to Day-Care-Entry
Relative to Quality of Attachment at 21 Month
in the Home Setting
in the Home Setting
in the Day-Care Setting
in the Day-Care Setting

Results (3)

Early vs. Late Enrollment

⇒***In the day-care setting***, infants enrolled after 12 months of age (***late***) reacted ***with more irritability*** during the first 3 weeks of the accomodation period and with ***more negative mood*** in the 2nd and 3rd week than did infants enrolled before the age of 12 months (*early*).

⇒***At home***, ***late-entry infants*** also reacted with ***more irritation and lowered mood*** in the first weeks than early-entry infants with some adaptation towards the 3rd week, but an increase again thereafter.

Early/Late Enrollment x Mode of Familiarization

⇒***Early-entry infants*** seemed to react ***less negatively in both settings when introduced*** to day care ***abruptly***.

⇒***Late-entry infants*** reacted ***more positively*** in the institution only ***in the 1st week when introduced leniently***, but more negatively thereafter. ***At home***, however, ***leniently introduced infants had more positive spirits*** and were mostly ***less irritable***.

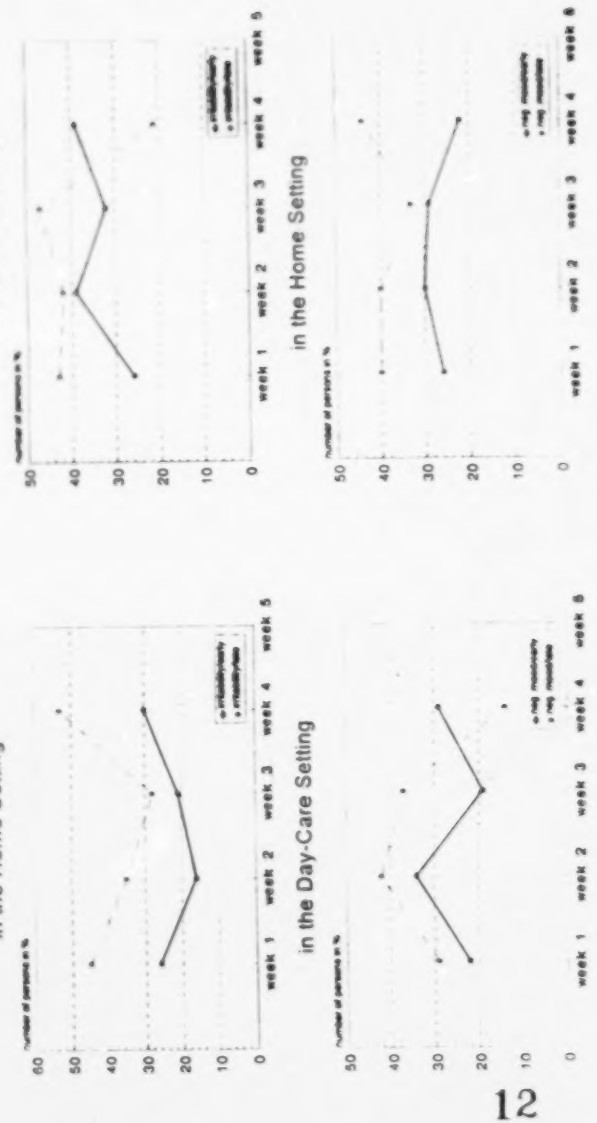
Early/Late Enrollment x Quality of Attachment

⇒***Early-entry infants did not differ*** in their reactions in the day-care setting ***as an indicator of later quality of attachment***. At home, however, later insecurely attached, but not securely attached, infants tended to show increasingly more negative mood over the weeks.

⇒***Late-entry infants*** appeared to adapt to the day-care setting by the 3rd week. Later securely attached infants reacted more positively in the 1rst week, and later insecurely attached infants more positively and less irritable in the second week. ***At home***, however, only the later ***securely attached infants appeared to be of good spirits and low irritability***.

⇒

The Emotional Reaction to Day-Care-Entry
for Infants with Early vs. Late Enrollment



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Discussion

As previously observed by caregivers and researchers, infants who passed the first year of life react to separations from their attachment figures and to strange environments more intensively than do younger infants. Younger infants seem to „prefer" clearly marked settings as indicated by „abrupt" introduction to day care. There is little indication that they attribute their day-care experiences to their relationship to their mothers.

In contrast, infants enrolled into day care after the age of one year seem to react in a much more differentiated and variable way. The new situation may at first suit their exploration interests. The exploration-attachment balance appears to be expressed in their swings in mood and irritability over the weeks. Furthermore, these older infants seem to react negatively to abrupt day-care enrollment, but mainly at home and towards their mothers. This is particularly true for infants with (later) insecure attachments. Only in this older group, infants with abrupt day-care introduction changed in attachment quality clearly from secure to insecure, as our previous analyses showed. It seems that around the age of one year, infants begin to relate settings, and by so doing may attribute their separation experiences in the day-care setting to their relationships with their mothers - quite independently of previous maternal sensitivity experiences.

These findings suggest that quality of attachment may be a valid index of the infant's day-care experiences only in a very restricted way: for older infants and with respect to the major separation experiences during the period of accomodation to the new and strange setting.

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